

What is claimed is:

1. A method for reservation-recording a broadcasting program comprising the steps of:

5 downloading broadcasting program information and storing the information in a PDA;

converting the stored broadcasting program information into data information to be displayed on a screen of the PDA and then outputting;

searching the broadcasting program information displayed on the screen;

10 and

performing a reservation-recording by selecting a reservation-recording key of the PDA based on the searched broadcasting program information.

2. The method of claim 1, wherein the step for performing a reservation-recording includes the steps of:

transmitting reservation-recording information to an event timer of a recording apparatus in response to the input of the reservation-recording key; and

storing the transmitted reservation-recording information to the event timer of the recording apparatus, operating the event timer on preset reservation time  
20 based on the reservation-recording information thereby turning on a power of the recording apparatus, and performing a reservation-recording.

3. The method of claim 1, wherein in the step for performing a reservation-recording, the broadcasting program information selected by a user among the displayed broadcasting program information is wirelessly transmitted to

the recording apparatus.

4. The method of claim 1, wherein in the step for downloading broadcasting program information and storing, broadcasting program information  
5 is downloaded through a broadcasting program data service provider's internet homepage.

5. The method of claim 1, wherein in the step for downloading broadcasting program information and storing, broadcasting program information  
10 is directly downloaded from a broadcasting receiver where broadcasting program information is stored.

6. The method of claim 1, wherein in the step for outputting the broadcasting program information on the screen, icons are generated on the basis  
15 of the stored broadcasting program information thus to be displayed on the screen.

7. The method of claim 6, wherein if the displayed icon is selected, broadcasting channel information, broadcasting time information, and broadcasting program information according to each channel and time are  
20 displayed as a list form.

8. The method of claim 7, wherein in the step for performing a reservation-recording, when the user selects an arbitrary broadcasting program, broadcasting channel information and broadcasting time information  
25 corresponding to the broadcasting program title are displayed with an enlargement,

and a guide message inquiring whether the information is to be set as reservation-recording information is displayed.

9. The method of claim 1, wherein in the step for searching the  
5 broadcasting program, if an electric program guide (EPG) is provided as the broadcasting program information, a channel is set by inputting an up/down key of the PDA when the channel inside the EPG is highlighted.

10. The method of claim 9, wherein in the step for searching the  
10 broadcasting program, a software channel management for the broadcasting program information is provided at the PDA thus to compare a channel set by a user with channel information of the program guide and to perform a channel search among substantial active channels.

15 11. The method of claim 1, wherein the PDA downloads broadcasting program information through a broadcasting receiver for receiving broadcasting program information thus to store in a memory and perform a search and a reservation-recording of the broadcasting program.

20 12. The method of claim 1, wherein the PDA accesses to a wireless internet network through a mobile communication module thus to download a broadcasting program from a broadcasting program service provider's internet homepage and store the program in a memory, and then performs a search and a reservation-recording of the program.

13. A broadcasting program reservation-recording method using a PDA comprising the steps of:

searching broadcasting program information using a PDA;

a user's selecting his desired broadcasting program among the searched

5 broadcasting programs, and transmitting reservation-recording information corresponding to the broadcasting program as a transmission packet (ex, CDMA packet) form;

transmitting the packetted reservation-recording information to a subscriber's server through a wireless internet network;

10 transmitting the reservation-recording information to the subscriber's IP address based on the transmission packet of the reservation-recording information which has been transmitted to the subscriber's server; and

performing a reservation-recording in a recording apparatus by receiving the reservation-recording information.

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14. The method of claim 13, wherein the step for performing a reservation-recording includes a step for turning on a power of the recording apparatus through a wakeup LAN.

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15. The method of claim 13, wherein in the step for performing a reservation-recording, the reservation-recording information is stored by an event timer including a non-volatile memory, a power of the recording apparatus is turned on at a preset reservation time of the broadcasting program on the basis of the reservation-recording information, and a reservation-record is performed.

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16. The method of claim 13, wherein the transmission packet includes a packet header for informing a data content, a subscriber's code for informing subscriber's information, reservation-recording information, and a subscriber's IP information.

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17. The method of claim 16, wherein the reservation-recording information includes channel information for performing a reservation-recording, time information regarding reservation start time and reservation finish time, and category information including a program list.

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18. The method of claim 13, wherein the transmission packet includes a packet header for informing a data content, a subscriber's PDA information, reservation-recording information, modem information when the recording apparatus is connected to the internet by a telephone wire.

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19. A broadcasting program reservation-recording system using a PDA comprising:

a CDMA module provided with a mobile communication module for receiving broadcasting program information;

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a remote communication controller for exchanging data with an external device or performing a wireless communication in order to control the external device;

a storage unit for storing broadcasting program information received through the CDMA module and control data for each kind of external device received by the remote communication controller;

a controller for converting the broadcasting program information stored in the storage unit into data information of a suitable form to be displayed and thereby outputting; and

5        a display unit for displaying data information regarding the broadcasting program information outputted from the controller on a screen.

20.      The system of claim 19 further comprising a key input unit for selecting the data information displayed on the screen.

10        21.      The system of claim 19, wherein the controller includes:

a CPU for generating icons for searching or controlling the broadcasting program information based on the data stored in the storage unit and thereby outputting on the screen of the PDA; and

15        a companion chip for controlling an operation of the remote communication controller through an interface with the CPU.

22.      The system of claim 19, wherein the controller sets an arbitrary broadcasting program selected by a user among the broadcasting program information displayed on the display unit in a recording apparatus as reservation-  
20        recording information.

23.      The system of claim 21, wherein the remote communication controller includes:

25        a remote control module for outputting a remote control signal in response to a remote control command for the external device provided from the companion

chip connected to the CPU; and

a transmitter/receiver for performing a wireless data communication link with the external devices by receiving the remote control signal from the remote control module.

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24. The system of claim 23, wherein the transmitter/receiver includes:

an infrared transmitter and an infrared receiver (IR transmitter/receiver) for providing an infrared wireless data communication link; and

a radio frequency data communication link (RF transmitter/receiver) for

10 providing a high frequency wireless data communication link.

25. The system of claim 19, wherein the display unit for controlling

video/audio data regarding the broadcasting program information and thereby outputting as screen information and audio information on the screen includes: a

15 video controller; an audio codec; a liquid crystal display (LCD) screen; a speaker; and a microphone.

26. A broadcasting program reservation-recording system using a

PDA comprising:

20 a service center for providing broadcasting program information;

a PDA for searching a broadcasting program by downloading broadcasting program information from the service center and thereby outputting reservation-recording information of the broadcasting program;

and a recording apparatus for reservation-recording the broadcasting

25 program provided from the service center based on the outputted reservation-

recording information of the PDA.

27. The system of claim 26 further comprising a mobile communication station for providing a wireless communication means between the  
5 service center and the PDA.

28. The system of claim 26, wherein the service center includes information of the PDA and internet access information of the recording apparatus.

10 29. The system of claim 28, wherein the internet access information includes IP address information of the recording apparatus when the recording apparatus is connected to the internet by an Ethernet, and includes telephone number information when the recording apparatus is connected to the internet by a telephone wire.

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30. The system of claim 29, wherein the recording apparatus is provided with a wakeup LAN module thus to turn on the recording apparatus at the time of a data communication request from outside.

20 31. The system of claim 30, wherein the wakeup LAN module includes:

a system bios unit including control information for controlling a power of the recording apparatus;

25 a physical layer unit for performing an interface with the system bios unit in response to the data communication request from outside; and

a backup battery for providing a power to the physical layer unit and the system bios unit.

32. The system of claim 31 further comprising a power control unit for  
5 turning on/off a power of the recording apparatus based on the power control  
information of the system bios unit.

33. The system of claim 31, wherein the system bios unit includes a  
power management logic unit that stands by with an operation-enable state by  
10 receiving a minimum power from the backup battery.